JOURNAL OF HYDROLOGY

VOLUME 139 NOS. 1–4 CONTENTS NOVEMBER 1992

(Abstracted/indexed in: *Biosis, Bull. Signal., Curr. Awareness Biol. Sci., Curr. Contents, Geo Abstr., Am. Geol. Inst. Bibliogr. Index Geol., PASCAL/CNRS, PROMIS, and AGRICOLA database*)

Research Papers

Modelling the hydrology of submediterranean montane catchments (Mont-Lozère, France) using TOPMODEL: initial results
P. Durand, A. Robson and C. Neal (Wallingford, UK) 1
Isotopic composition of natural thermal discharges on Vulcano island, southern Italy
A. Minissale (Firenze, Italy) 15
Recharge mechanisms and geochemical processes in a semi-arid sedimentary basin, Eastern Cape, South Africa
K. Sami (Grahamstown, South Africa) 27
Stable isotope study of the Ganga (Ganges) river system
R. Ramesh and M.M. Sarin (Ahmedabad, India) 49
Marine airborne salts applied to trace evapotranspiration, local recharge and lateral groundwater flow in Western Australia
E. Mazor (Rehovot, Israel) and R. George (Bunbury, W.A., Australia) 63
The effect of contact area on the permeability of fractures
R.W. Zimmerman, D.-W. Chen and N.G.W. Cook (Berkeley, CA, USA) 79
Flow occurrence between confined aquifers through improperly plugged boreholes
C.B. Avcı (Istanbul, Turkey) 97
Orographic rainfall over low hills and associated corrections to radar measurements
M. Kitchen and R.M. Blackall (Bracknell, UK) 115
Modeling of colloidal uranium transport in a fractured medium
J. van der Lee, E. Ledoux (Fontainbleau, France) and G. de Marsily (Paris, France) . . . 135
Assessment of soil moisture movement in nuclear subsidence craters
S.W. Tyler, W.A. McKay and T.M. Mihevc (Reno, NV, USA) 159
Constraints on the exploitation of basement aquifers in East Africa — water balance implications and the role of the regolith
K.W.F. Howard (Scarborough, Ont., Canada) and J. Karundu (Entebbe, Uganda) 183
Sediment transport in the Cauvery River basin: sediment characteristics and controlling factors
P. Vaithiyanathan (Ste-Foy, Que., Canada), Al. Ramanathan (Chidambaram, India) and V. Subramanian (New Delhi, India) 197
Carbonate chemistry of surface waters in a temperate karst region: the southern Yorkshire Dales, UK
A. Pentecost (London, UK) 211
Soil water content at R-5. Part 1. Spatial and temporal variability
K. Loague (Berkeley, CA, USA) 233
Soil water content at R-5. Part 2. Impact of antecedent conditions on rainfall–runoff simulations
K. Loague (Berkeley, CA, USA) 253
Automated recognition of valley lines and drainage networks from grid digital elevation models: a review and a new method
A. Tribe (Reading, UK) 263

Book Review
Institute of Hydrology 1990/1991 Report 295

Corrigendum 297

Announcements 299

JOURNAL OF HYDROLOGY

VOLUME 139 NOS. 1–4 CONTENTS NOVEMBER 1992

(Abstracted/indexed in: *Biosis, Bull. Signal., Curr. Awareness Biol. Sci., Curr. Contents, Geo Abstr., Am. Geol. Inst. Bibliogr. Index Geol., PASCAL/CNRS, PROMIS, and AGRICOLA database*)

Research Papers

Modelling the hydrology of submediterranean montane catchments (Mont-Lozère, France) using TOPMODEL: initial results
P. Durand, A. Robson and C. Neal (Wallingford, UK) 1
Isotopic composition of natural thermal discharges on Vulcano island, southern Italy
A. Minissale (Firenze, Italy) 15
Recharge mechanisms and geochemical processes in a semi-arid sedimentary basin, Eastern Cape, South Africa
K. Sami (Grahamstown, South Africa) 27
Stable isotope study of the Ganga (Ganges) river system
R. Ramesh and M.M. Sarin (Ahmedabad, India) 49
Marine airborne salts applied to trace evapotranspiration, local recharge and lateral groundwater flow in Western Australia
E. Mazor (Rehovot, Israel) and R. George (Bunbury, W.A., Australia) 63
The effect of contact area on the permeability of fractures
R.W. Zimmerman, D.-W. Chen and N.G.W. Cook (Berkeley, CA, USA) 79
Flow occurrence between confined aquifers through improperly plugged boreholes
C.B. Avcı (Istanbul, Turkey) 97
Orographic rainfall over low hills and associated corrections to radar measurements
M. Kitchen and R.M. Blackall (Bracknell, UK) 115
Modeling of colloidal uranium transport in a fractured medium
J. van der Lee, E. Ledoux (Fontainbleau, France) and G. de Marsily (Paris, France) . . . 135
Assessment of soil moisture movement in nuclear subsidence craters
S.W. Tyler, W.A. McKay and T.M. Mihevc (Reno, NV, USA) 159
Constraints on the exploitation of basement aquifers in East Africa — water balance implications and the role of the regolith
K.W.F. Howard (Scarborough, Ont., Canada) and J. Karundu (Entebbe, Uganda) 183
Sediment transport in the Cauvery River basin: sediment characteristics and controlling factors
P. Vaithiyanathan (Ste-Foy, Que., Canada), Al. Ramanathan (Chidambaram, India) and V. Subramanian (New Delhi, India) 197
Carbonate chemistry of surface waters in a temperate karst region: the southern Yorkshire Dales, UK
A. Pentecost (London, UK) 211
Soil water content at R-5. Part 1. Spatial and temporal variability
K. Loague (Berkeley, CA, USA) 233
Soil water content at R-5. Part 2. Impact of antecedent conditions on rainfall–runoff simulations
K. Loague (Berkeley, CA, USA) 253
Automated recognition of valley lines and drainage networks from grid digital elevation models: a review and a new method
A. Tribe (Reading, UK) 263

Book Review
Institute of Hydrology 1990/1991 Report 295

Corrigendum 297

Announcements 299